

REMARKS

Claims 1-18 are pending. Each of independent claims 1, 6, 11, 14 and 17 has been amended as described herein. Reconsideration is respectfully requested in light of the amendments and remarks made herein.

Regarding the drawings, in accordance with the Examiner's request, each of Figs. 1 and 2 has been amended to include the legend "PRIOR ART," as indicated on the accompanying replacement sheets.

Minor amendments have also been made to the specification to clarify the description and to correct an obvious error.

Turning now to the claim rejections, claims 1-18 have been rejected under 35 U.S.C. § 103(a) based on the prior art described in applicants' specification in view of U.S. Patent No. 6,633,923 to *Kukura et al.* (*Kukura*). This rejection is respectfully traversed.

Applicants' invention enables string data containing null (0x00) data in the string to be passed accurately and reliably between objects without using binary conversion to convert the string data (e.g., the first character string in the claims) to a special format. Each of independent claims 1, 6, 11 and 17 has been amended to recite this limitation. The invention is particularly useful in processing bar code data containing null data. The invention further provides a software development tool for enabling a POS system or other system to handle a variety of data types.

There are methods for forcibly converting null (0x00) data using binary conversion to some other value before data transfer, and then restoring null (0x00) data in a following object. This is essentially what is taught in *Kukura*. In addition to being complicated, however, the conversion processes used by the different objects must match, and the receiving object is therefore dependent upon the design (operation) of the sending object. This is contradictory to one goal of object-oriented programming, which is to improve software reusability and modularity. Furthermore, if the receiving object cannot process the binary converted data, it might output a completely different character string.

Applicants' invention, as set forth in the pending claims, overcomes this problem. Accordingly, neither the art discussed by applicants in the background section of the application nor the teachings of *Kukura*, whether taken individually or in combination, teaches applicants' claimed invention.

Kukura also differs in another respect from applicants' claimed invention in that, in applicants' invention, a character string containing null data, even in a middle portion of the string, that can be reliably passed without the null characters terminating the string, can be created regardless of the declared type of the string data. Compare *Kukura*, which teaches the creation of an object_id segment "with an encoded length of eleven octets—one octet for the length field, nine octets for the text and one the NULL termination character." *Kukura*, col. 59, lines 58-60. The NULL termination character is also part of the octet sequence, as is stated in *Kukura* at col. 59, lines 54-56, which means that the one octet for the length field includes the NULL termination in number. More importantly, the null termination is not real (essential) data but interpreted as terminating the octet sequence. In contrast, applicants' claimed invention can handle null data anywhere in the character string, even in a middle portion, without interpreting it as terminating the string. Claim 14 has been amended to further emphasize this feature.

Finally, it should be noted that claim 6 has been additionally amended to add "means for" language before "detecting" and before "converting" to clarify that claim 6 is a means plus function claim. This amendment is simply intended to clarify the claim language, not to narrow the scope of this or any other pending claim.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

Respectfully submitted,

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AMENDMENTS TO DRAWINGS:

Each of Figs. 1 and 2 has been amended as requested by the Examiner to include the legend "PRIOR ART." Replacement sheets for Figs. 1 and 2 incorporating the amendment are provided herewith.